**What goes into pre-service teachers' actions towards the common good? Leadership, citizenship, bravery, and other factors.**

**Željko Rački**, Faculty of Education, J. J. Strossmayer University of Osijek, Croatia, zracki@foozos.hr

**Marija Sablić**, Faculty of Education, J. J. Strossmayer University of Osijek, Croatia, msablic@foozos.hr

**Alma Škugor**, Faculty of Education, J. J. Strossmayer University of Osijek, Croatia, askugor@foozos.hr

**Conference subtheme**:

**Abstract:**

The aim of this study was to explore the predictive validity of a limited set of theoretically related constructs for pre-service teachers' behaviors directed towards the common good. These are operationalized as consensual peer-assessed, prosocial civic actions. The measured constructs included the self-assessed traits such as valor, bravery, courage, nonconformity, leadership, cooperation, and citizenship as well as individual differences in sensitivity to injustice. The study participants were 94 students in their third year of university teacher studies (age range: 20–24 years). The results of the multiple regression analysis point to the predictive importance of self-assessed bravery, sensitivity to befallen injustice from the observer perspective, and cooperativeness, explaining one-fifth of the variance of prosocial civic actions. Prosocial civic participation is considered to belong to the key competences for lifelong learning. Accordingly, the findings were interpreted in relation to the contemporary educational perspectives on civic education, social and civic responsibility, teacher pre-service and in-service education, and the empirically proven influence of teachers on their students' learning and the outcomes of that learning.

Keywords: teacher traits, leadership, cooperation, citizenship, values

**1. Introduction**

Communicating a strong sense of right and wrong and teachers’ well-developed sense of morals and values that goes beyond conventional rules may prove indispensable for the quality teaching practice and its accountability. If we want to have future moral leaders in education, we need to support the development and expression of teachers' and students' acts towards the common good. By focusing on their personal diffierences, we aim to shed light in this study on what goes into pre-service teachers' actions towards the common good.

**2. Literature review**

In this introduction we refer to many sociopsychological and educational constructs of immediate importance to our study findings and the recurring teacher education practice concerns. We deliver our literature review along two main theoretical frames that represent the basis of our study findings. The first one refers to the ecological model of human development (Bronfenbrenner, 1979; Woolfolk Hoy, Davis, & Pape, 2006, p. 727) that suggests that individuals are embedded in and significantly affected by several nested ecosystems. Furthermore, within our second theoretical framework we continuously point to the fact that *communication* traverses these nested ecosystems.

Teaching and learning are communicative acts situated within multiple interacting contexts. These include cultural norms and values, state and national context, immediate school and classroom context, and finally, the self or the sense of identity (see Wai & Rindermann, 2017). When we take into account the cultural norms and values, including the meaning of schooling, educational objectives (Anderson & Kratwohl, 2001; Bloom, 1956), and the state and national context, it is clear that teachers are currently perceived as civic agents (Mirra & Morrel, 2011; Mcintyre, 2006), with citizenship usually referring to responsible life in a free society (see Giroux, 2013; Power & Scott, 2014). The social and civic competence, sense of initiative and entrepreneurship, and cultural awareness and expression are some of the Key Competences for Lifelong Learning — A European Reference Framework (2006), stated in the recommendation of the European Parliament. Social and civic competences include personal, interpersonal and intercultural competence. They cover all forms of behaviour that equip individuals to participate in an effective and constructive way in social and working life, particularly in increasingly diverse societies, and to resolve conflict where necessary. Civic competence equips individuals to fully participate in civic life based on knowledge of social and political concepts and structures, and a commitment to active and democratic participation. Because the initial education and training should offer all young people the means to develop these key competences, the communication of the strong sense of right and wrong may be perceived as constituting an integral part of the role of the teacher. The social context, interpersonal relationships (Godor & Szymanski, 2017; Jellesma, Zee, & Koomen, 2015), and emotional well-being are important to student learning because interpersonal attachments are a fundamental human motivation (Baumeister & Leary, 1995) related to either personal thriving or distress (see Baumeister, Dewall, Ciarocco, & Twenge, 2005; Jussim, Eccles, & Madon, 1996; Lee, Draper, & Lee, 2001; Williams & Galliher, 2006). In 2015 the APA's Coalition for Psychology in Schools and Education among the Top 20 principles from psychology for preK–12 teaching and learning listed the overarching principles that summarize the following: a) learning is situated within multiple social contexts, b) interpersonal relationships and communication are critical to both the teaching–learning process and the social-emotional development of students, c) emotional well-being influences educational performance, learning, and development, and d) expectations for classroom conduct and social interaction are learned and can be taught using proven principles of behavior and effective classroom instruction. These psychological principles point to the importance of numerous social processes in education.

Teachers in general display social vocational interests (see Holland, 1959, 1997), including generativity and the care for the wellbeing of others communicated in daily practice. As the longitudinal study of pre-service teachers' socially perceived traits by Rački, Škugor, & Sablić (in press) suggests, the *communicative* in the ideal teacher prototype stands for—*well informed or knowledgeable, norm-conscious, and wellbeing related production of authentic communications within the constraints of the teacher role by a person pleasing in appearance*. This suggests significant and positive relations with peer-assessed pre-service teachers' creativity, intelligence, knowledge, religiousness, and physical attractiveness. This lengthy list points to some sources of variance of what is communicated, and in what manner. Rački, Bakota, & Flegar (2015) found that the tested pre-service teachers' word knowledge was predictive, to a degree, of self-assessed linguistic creative behaviors. This may be so because the word knowledge can be considered a vehicle for the acquisition, refinement, and *expression* of thought, or communication. Yet, by communicating teachers enact and transmit knowledge or various learned beliefs and values (see Ferić, 2009; Šverko, Babarović, & Šverko, 2007) in accord with their own developed identity and self-efficacy (see Bandura, 1995; Klassen & Tze, 2014). Richardson (1996) states that the three categories of experience influence knowledge and beliefs about teaching: personal influences, schooling, and knowledge. Personal influences such as stories and teacher biographies shape the views of teaching. Schooling refers to what prospective teachers may accrue from the study experiences, and the knowledge refers to knowledge related to academic subjects and pedagogical knowledge usually delivered in pre-service teacher education. In view of this, a question may arise whether we are educating teachers to make a difference, in other words to act towards the common good.

Some of the well-known sociopsychological processes linked to individual and group actions, especially with regard to the common good as the focus of this study, include conformity (Asch, 1956), obedience to authority (Milgram, 1963), ethics in social roles (Zimbardo, 1973), and moral reasoning (Kohlberg, 1976). For example, according to Kohlberg's model of moral thinking (see Kohlberg, 1976), the advanced, post-conventional level of moral development includes the acceptance of universal and personal moral principles that are valid apart from authority, in line with the civic engagement towards the common good. Other processess include leadership (Davis, Rimm, & Siegle, 2014; Mumford & Connelly, 1999; Pfeiffer, 2009; Sisk, 1993) development of competence (i.e., *in teacher role*, see Tankersley, Brajković, & Handžar, 2012), expertise (Simonton, 2000; Subotnik & Jarvin, 2005; Wai, 2014), and eminence (see Subotnik, Olszewski-Kubilius, & Worrell, 2011), as well as character strengths and virtues (Davis, 2003; Peterson & Seligman, 2004). The measures of these personality differences are therefore included in this study.

Due to space restrictions and the present scope of this research, comparatively more attention in this study is given to the self, bringing us a bit closer to the stated criterion variable in this study, *the common good*. According to Davis, Rimm, & Siegle (2014, p. 274) at the NationalResearch Centere on the Gifted and Talented (NRC/GT), *Operation Houndstooth* focuses on promoting six core interacting topic areas for the common good: *optimism* (hope, sense of competence stemming from hard work), *courage* (moral conviction, psychological and intellectual independence, freedom from fear of group rejection), *romance with a topic or discipline* (absorption, passion, self-actualization), *sensitivity to human concerns* (empathy, altruism, insight), *physical and mental energy* (charisma, curiosity, vitality, excitability), and *vision and a sense of destiny* (sense of direction, sense of power to change things, achievement motivation). The term *Houndstooth* refers to the houndstooth-pattern background behind the three-ring conception of giftedness (Renzulli & Reis, 2003, p. 76). Mikulić, Rački, & Brajković (2017) reported that teachers perceived as highly competent in different focus areas of teaching practice are perceived to be gifted. Sternberg (2005) believes that leadership is the most important kind of giftedness. For him, leadership is a function of generating ideas (creatively), evaluating and implementing these ideas (intelligence), and ensuring that these ideas are for the common good of those involved (i.e., wisdom). Wisdom is a trait also commonly associated with quality teaching (Arlin, 1999; Fung, 1996; Gentry, Steenbergen-Hu, & Choi, 2011; Porath, 2009; Towers & Porath, 2001). Acknowledging the personality continuities from childhood to adulthood (Caspi, 2000), and the relatively high stability of personality traits in the samples of adults such as the one that took part in the present study, we will shed light on some of the psychological processes at work in daily education.

The aim of this study is to explore the predictive validity of a limited set of theoretically related personality constructs for pre-service teachers' behaviors, which are operationalized as the consensually peer-assessed, prosocial civic actions towards the common good.

**3. Methodology**

**3.1. Participants**

The voluntary study participants were 94 students of university teacher studies in their third year of study. These middle class, educated Caucasian women with *M*age = 21.19 years (SD = 0.63; age range: 20–24) were chosen as a convenience sample. They represented education generalists, in other words future teachers who will teach all school subjects (i.e., language, mathematics, natural sciences, physical education, and the arts) to children aged 6–12.

**3.2. Materials and Procedure**

The participants gave their written consent and participated on one occasion in the study for the duration of two hours. They were debriefed immediately following the study in line with the research ethics. The study consisted of two parts, the peer-assessment of the criterion measure, and the following self-assessments of the prepared questionnaires. The student participation was not anonymous, so care was taken to ensure participant confidentiality.

In the first part of the study the participants individually rated their study-year peers on their involvement in prosocial civic actions directed towards the common good. The social judgments of peer behavior, theoretically based on the hypotheses of usefulness, but not necessarily absolute accuracy of social judgment (e.g., Funder, 1987; Kolar & Funder, 1996; Jussim, Eccles, & Madon, 1996; Jussim, Harber, Crawford, Cain, & Cohen, 2005), were used in this study. The participants were provided with a sheet of paper with the names of all the study-peers listed in alphabetical order. At the top of the paper, they were asked to provide their name, and were required to give an individual answer for each of the listed peers on a 5-point scale akin to school grades (ranging from *Unsatisfactory* to *Excellent*) on how that peer, in their own opinion, exemplified the following behavior: *He/she proposes, develops, and successfully carries out actions of positive significance to the study year, individuals or community, with personal involvement in all types of actions you consider to be directed towards the common good.* The peer-ratings were used because the participants encountered each other in small groups for two consecutive study years prior to this study during which they had the opportunity to get well acquainted, which supports the criterion validity of peer-ratings. When finished, they were asked to state what they had in mind when rating their peers on the stated general criterion question. The students provided specific desriptions of various peer prosocial behavior directed towards the common good, such as dedicated and sustained volunteer work both at the faculty as well as outside (e.g., *she voluntarily leads a children's choir*), the peer engagement in student council and other university organizations, or their peers being generally active outside the regular study duties in caring for somebody or something (e.g. involvement in student organized charity work, acting as representative/s of study year in dealing with the faculty staff, serving as the student ombudsmen, or being an initiator of projects supported by the university, faculty, schools, or other organizations). Higher scores indicated more peer-rated student prosocial activity directed towards the betterment of the general living and thriving conditions of those surrounding them. The consensually rated criterion measure, *the peer-rated student participation in prosocial civic actions directed towards the common good*, had a possible range of peer ratings from group averaged 1 to 5. The observed range was 1.93–4.71 (M = 2.93, SD = 0.61), representing low to high result on the criterion measure for the participants.

To match the level of criterion measure behavior generality, the general construct measures used in the second part were taken from The International Personality Item Pool (IPIP; Goldberg, 1999; Goldberg et al., 2006; Mlačić & Goldberg, 2007). They were independently translated into the Croatian language by two university professors of English language, with possible item translation issues discussed with the designated psychologist. Five scales were chosen for use in this study due to their hypothesized importance for the peer-rated student participation in prosocial civic actions (e.g., cooperation, citizenship/teamwork, bravery/courage/valor, leadership, and conformity), limited by the given study time constraints. These five chosen IPIP scales theoretically covered some of the sociopsychological determinants of prosocial civic actions, spanning intraindividual valor, bravery, and courage, and the student-perceived personal differences closely tied to group dynamics, such as leading and following within the available social context. On all of the IPIP measures, the participants indicated on a 5-point scale the extent to which they agreed or disagreed with each of the statements. Linear combinations of scale items divided by the number of items in each scale represented the independent measures used in this study, with Cronbach *α* ranging from .63 to .78.

The scale measuring *Cooperation* (HPI) consisted of one positively worded item (*Rarely overindulge*), and nine negatively worded items (*Resist authority; Oppose authority; Act wild and crazy; Feel that people have a hard time understanding me; Break rules; Enjoy wild flights of fantasy; Swim against the current: Look for hidden meanings in things; Suspect hidden motives in others*). Higher scores indicated a greater tendency to display cooperation. Cronbach’s alpha for the total scale in this study was .78.

The scale measuring *Citizenship/Teamwork* [VIA: Cit] consisted of four positively (*Don't miss group meetings or team practices; Enjoy being part of a group; Support my teammates or fellow group members; Feel I must respect the decisions made by my group*), and five negatively worded items (*Am not good at working with a group; Prefer to do everything alone; Work best when I am alone; Keep to myself; Don’t think it’s important to socialize with others*). Higher scores indicated a greater tendency to behave in ways descriptive of teamwork and/or citizenship. Cronbach’s alpha for the total scale in this study was low but satisfactory at .63.

The scale measuring *Bravery/Courage/Valor* [VIA: Val] consisted of six positively worded items (*Have taken frequent stands in the face of strong opposition; Don't hesitate to express an unpopular opinion; Call for action while others talk; Can face my fears; Speak up in protest when I hear someone say mean things; Am a brave person*), and four negatively worded items (*Avoid dealing with uncomfortable emotions; Avoid dealing with awkward situations; Do not stand up for my beliefs; Don't speak my mind freely when there might be negative results*). Higher scores indicated a greater tendency to display valor, bravery, and courage. Cronbach’s alpha for the total scale in this study was .69.

The scale measuring *Leadership* [VIA: Lea] consisted of four positively worded items (*Try to make sure everyone in a group feels included.; Am good at helping people work well together; Am told that I am a strong but fair leader; Try to make my group members happy*), and three negatively worded items (*Have difficulty getting others to work together; Am not good at taking charge of a group; Am not good at planning group activities*). Higher scores indicated a greater tendency to behave in ways descriptive of leadership. Cronbach’s alpha for the total scale in this study was .71. Note that these last three IPIP scales [VIA: Cit, Val, Lea] belong to Peterson & Seligman's (2004) *Values in Action Character Survey* (VIA).

The scale measuring *Conformity* (JPI: Cooperativeness [Cpr]) consisted of five positively worded items (*Worry about what people think of me; Conform to others' opinions; Need the approval of others; Want to amount to something special in others' eyes; Do what others do*), and five negatively worded items (*Don't care what others think; Am not concerned with making a good impression; Feel it's OK that some people don't like me; Want to form my own opinions; Want to be different from others*). Higher scores indicated a greater tendency to conform. Cronbach’s alpha for the scale in this study was .71.

In order to afford for the motivational variables regarding engagement in prosocial civic actions towards the common good, it was hypothesized that the psychological construct of sensitivity to befallen injustice may prove predictive of the studied criterion behavior. In this study we used *The Justice Sensitivity Scales* (Ćubela Adorić & Jurkin, 2008) that aim to measure the sensitivity to befallen injustice from the victim, the observer, and the profiteer perspective, with exemplary items listed in the brackets in the same scale order (e.g., *It makes me angry to be treated worse than others; /I get upset when I realize someone has used others; /I get upset when I get praised for someone else's work*). Higher scores on all three scales indicated higher self-assessed sensitivity to befallen injustice from these three perspectives that a person may assume. Cronbach’s alpha for the scales, in the same order, were .84, .87, and .90. The statistical parameters for all of the used measures are listed in Table 1.

By using the regression analyses presented in the results section, in this study we aim to explore the predictive validity of the theoretically related personality constructs for the pre-service teachers' behaviors (actions) directed towards the common good, which are operationalized as the consensually peer-assessed prosocial civic actions.

**4. Results**

In order to provide the answer to the stated research question, three groups of analyses were performed: correlation analyses, principal component analysis, and multiple and sequential regression analyses. The intercorrelations, means, and standard deviations for all the variables used in this study are listed in Table 1.

Table 1

*Summary of intercorrelations, means, and standard deviations for all the variables in the study*

| Measures | *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* | *9* |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. Criterion measure (DV):  Prosocial civic actions | — |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 2. Cooperation | .11 | — |  |  |  |  |  |  |  |
| 3. Citizenship/Teamwork | .28\*\* | .20 | — |  |  |  |  |  |  |
| 4. Bravery/Courage/Valor | .36\*\* | –.17 | .44\*\* | — |  |  |  |  |  |
| 5. Leadership | .32\*\* | .06 | .51\*\* | .45\*\* | — |  |  |  |  |
| 6. Conformity | .07 | .11 | .12 | –.32\*\* | –.03 | — |  |  |  |
| 7. Sensitivity to injustice/Victim perspective | .15 | –.14 | .08 | .04 | .23\* | .32\*\* | — |  |  |
| 8. Sensitivity to injustice/Observer perspective | .28\*\* | –.19 | –.03 | .19 | .16 | .10 | .53\*\* | — |  |
| 9. Sensitivity to injustice/Profiteer perspective | .21\* | –.08 | .06 | .30\*\* | .22\*\* | –.21\* | .23\* | .43\* | — |
|  |  |  |  |  |  |  |  |  |  |
| *M* | 2.93 | 3.42 | 3.58 | 3.31 | 3.78 | 2.74 | 4.44 | 4.60 | 4.36 |
| *SD* | 0.61 | 0.56 | 0.44 | 0.53 | 0.46 | 0.49 | 0.72 | 0.68 | 0.80 |
| Skew | 0.93 | –0.51 | –0.18 | 0.06 | –0.14 | 0.09 | –0.19 | –0.07 | –0.66 |

*Note.* *N* = 94. Potential range 1–5; *low* to *high*. Potential range for the sensitivity to injustice scales is 1–6; *low* to *high*. All variables are normaly distributed. Pearson *r* is used.

\**p* < .05. \*\**p* < .01.

No cases had missing values. The linear combinations of items in the scales represented variables for further analyses. All the variables followed the normal distribution. The correlation analyses indicated that the criterion measure of peer-rated prosocial civic actions correlated positively and significantly in the descending order with the self-asessed bravery/courage/valor, *r*(94) = .36, *p* < .01, leadership, *r*(94) = .32, *p* < .01, sensitivity to befallen injustice from the observer perspective, *r*(94) = .28, *p* < .01, citizenship/teamwork, *r*(94) = .28, *p* < .01, and sensitivity to befallen injustice from the profiteer perspective, *r*(94) = .21, *p* = .038. The regression analyses were used to assess the proportion of variance of DV predictable with the self-assessments (IVs).

Preliminary regression analyses indicated that the variable *Cooperation* in model A (Table 3) is useful in prediction of the DV and in increasing the multiple *R*2 by virtue of its correlations, mostly negative, with other independent variables (see Table 1). As a suppressor variable, it supresses variance that is irrelevant to the prediction of the DV. To take into account these complex relationships, the factor analysis was performed on all independent variables in order to create new linear combinations of IVs to optimally predict DV, and therefore aid in the interpretation of the study findings.

Table 2

*Factor loadings for exploratory factor analysis with varimax rotation of personality self-assessment scales*

| Participants' self-assessments | Factors | | |  |
| --- | --- | --- | --- | --- |
| I | II | III | *h* |
| Citizenship/Teamwork | **.87** | –.09 | .14 | .78 |
| Leadership | **.80** | .20 | –.04 | .68 |
| Bravery/Courage/Valor | **.65** | .20 | **–.53** | .74 |
| Sensitivity to injustice/Observer perspective | .05 | **.86** | .02 | .74 |
| Sensitivity to injustice/Victim perspective | .13 | **.76** | **.40** | .76 |
| Sensitivity to injustice/Profiteer perspective | .20 | **.59** | **–.39** | .53 |
| Cooperation | .29 | **–.43** | **.39** | .42 |
| Conformity | .00 | .14 | **.87** | .78 |
| Eigenvalues | 2.32 | 1.64 | 1.45 | — |
| % of explained variance | 28.99 | 20.53 | 18.18 | — |

*Note.* Factor loadings ≥ .30 are printed in bold.

With the average communality at .68, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy at .59, and Bartlett's Test of Sphericity at *χ2*(28) = 172.23, *p* = .001, the Principal Component Analysis (PCA) was performed. Out of eight variables (i.e., second order analysis of scale results) three components were initially extracted based on the Eigenvalues over 1 with the characteristic roots as follows: 2.32, 1.64, and 1.45. Based on the scree plot, reproducibility and interpretability, the three-component PCA solution with orthogonal rotation was retained. These three components accounted for 67.7% of the common variance and are listed in Table 2. The single scale scores (model A), and the composite regression factor scores (Factor I, II, and III) were used as predictors (model B) of the criterion, as listed in Table 3.

Table 3 displays the unstandardized regression coefficients (*B*) and intercepts, the standardized regression coefficients (*β*), the semipartial correlations (*sr*i2), *R*2, and adjusted *R*2. With diagnostics pointing to no collinearity issues and standardized residuals within the expected limits, the two regression models presented in Table 3 proved robust. *R* for regression in model A was significantly different from zero, *F*(3, 90) = 8.55, *p* < .001, with *R*2 at .22 and 95% confidence limits from .07 to .36. The adjusted *R*2 value of .20 indicates that one fifth of the variability in peer-rated prosocial civic actions is predicted by the self-assessed bravery/courage/valor, sensitivity to injustice from the observer perspective, and cooperation. The size and the direction of relationships suggest that the more prosocial civic actions are made among women with higher scores on these three scales. However, self-assessed bravery/courage/valor is more important, as indicated by the squared semipartial correlations. These findings are elaborated in more detail in the sequential regression analysis.

Taking into account the results of the multiple regression analysis (model A) and the insights from the principal component analysis (PCA; see Table 2), the sequential regression analysis was employed to determine if any additional information on *variable structure* improved the prediction beyond what was accounted for by the differences in the overall and the combined scale scores in multiple regression. Factors I, II, and III were used as orthogonal predictors to clarify what they carry as additional information in model B. In this model, *R* was significantly different from zero at the end of step 1 and step 2, painting a richer picture of variable and structural relations described in the discussion section of this article. After step 1, *R*2 = .15, *F*(1, 92) = 16.76, *p* < .001. After step 2, *R*2 = .20, *F*(2, 91) = 11.42, *p* < .001. After step 3, with all three IVs in the equation, *R*2 = .20 with 95% confidence limits from .06 to .34, *F*(3, 90) = 7.53, *p* < .001, all the variance in equation was already accounted for by step 1 (15.4%), and step 2 (4.66%).

Table 3

*Standard multiple regression analysis of self-assessed personality measures on peer-assessed prosocial civic actions (model A), and the sequential regression analysis results with composite factor scores (model B)*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Criterion measure (DV): Prosocial civic actions | *B* | SE B | *β* | *sr*2  (unique) | 95% CI of *B* |
| A) |  |  |  |  |  |
| *Constant* | –0.25 | 0.67 |  |  | [–1.59, 1.08] |
| Bravery/Courage/Valor | 0.40 | 0.11 | .35\*\* | .12 | [0.18, 0.62] |
| Sensitivity to injustice/Observer perspective | 0.23 | 0.09 | .25\*\* | .06 | [0.06, 0.40] |
| Cooperation | 0.23 | 0.10 | .22\* | .04 | [0.03, 0.44] |
|  | *R* = .47; *R*2 = .22; Adj. *R*2 = .20 [95% CI .07–.36] | | | | |
| B) |  |  |  |  |  |
| *Constant* | 2.93 | 0.06 |  |  | [2.82, 3.05] |
| Factor I (Step 1) | 0.24 | 0.06 | .39\*\* | .15 | [0.12, 0.35] |
|  | *R* = .39; *R*2 = .15; Adj. *R*2 = .15, *p* < .001 | | | | |
| Factor II (Step 2) | 0.13 | 0.06 | .22\* | .05 | [0.02, 0.24] |
|  | *R* = .45; *R*2 = .20; Adj. *R*2 = .18, Δ *R*2 = .05, *p* = .024 | | | | |
| Factor III (Step 3) | 0.00 | 0.06 | .00 | .00 | [–0.11, 0.12] |
|  | *R* = .45; *R*2 = .20; Adj. *R*2 = .17, Δ *R*2 = .00, *p* = .997  [95% CI .06.–.34] | | | | |

*Note.* *N* = 94. CI = confidence interval. Steiger & Fouladi (1992) R2 computer program was used to calculate the confidence intervals (CI) for R2; lower and upper limits are shown.

\**p* < .05. \*\**p* < .01.

Given the value of *R*2 at .22 for model A, and .20 for model B, the effect sizes for these multiple regression coefficients (i.e., Cohen's *f*2) are .28, and .25, indicating medium effect size. By using more complex composite scores, or self-assessments of relatively stable dispositional characteristics, such as citizenship/teamwork, leadership, bravery/courage/valor, sensitivity to befallen injustice (more specifically from the observer perspective), and cooperation or lack thereof, it is possible to explain at least one fifth of the variance of the peer-rated prosocial civic actions. These findings are discussed in the following section.

**5. Discussion**

The results of this study generally point to the fact that up to a certain level (one-fifth of the variance) being non hesitant in expressing (unpopular) views with bravery, courage, and valor, while being sensitive to befallen injustice, especially from the observer perspective, and flexibly cooperative towards the group betterment, may result in the creation and successful implementation of peer-rated prosocial civic actions of positive value to individuals and community perceived as the common good.

The findings of this study are of specific importance to the teacher educators, and the future teachers as the participant group in this study, for they (will) perform in education on daily basis throughout their career, possibly modeling and supporting their students’ and colleagues' behaviors of serious, cumulative, and preferably positive consequences. As the results presented in Table 2 and Table 3 suggest in more detail, the first factor has predictive validity for the common good through behaviors of active citizenship, leadership and teamwork, and acts of bravery, courage, and valor. These processes alone explained 15% of the criterion variance. Together, they stand for some of the character strengths and virtues described by Peterson & Seligman (2004), and this study proves their importance. The second factor may describe the additional predictive importance of processes descriptive of the willingness of individuals to refuse to cooperate with the group when they perceive that the group is involved in unjust acts. Such refusal of cooperation, as is evident in the negative loading on the cooperation scale and positive loadings on the sensitivity to injustice scales (see Table 2, Factor II), adds additional 5% to the overall explained criterion variance. This small yet significant addition may prove to have significant importance for the commencement of prosocial behavior regardless of its possible collision with the group expectations. To exemplify this point of discussion, by using her metaphor of the *sense of justice murmuring underneath*, the worldly acclaimed musician and social activist involved in music education (e.g., see *The Biophilia Educational Project*), Guðmundsdóttir, in the lyrics of one of her songs posed a question “How am I going to make it right?” (2004). This cultural reference succinctly describes the outwardly communicated moment when one feels inclined to act upon one's hurt sense of justice, yet wisely accounts for the common good, and simultaneously, one's fear of rejection, ridicule, or being perceived as oppositional and defiant (non-cooperative). While acting within the constraints of the teacher role, and yet paying attention to the murmur underneath, an expert teacher may didactically develop a set of *authentic communications* shaped in such a way to motivate and inspire others to act towards the recognized common good. Herein lies the communicative power that teachers possess.

Are we educating future teachers to make a difference towards the common good? This is not a simple task to teach, and the balance in this complex social endeavor that we call the common good may not be easy to achieve in one go. The results of this study have importance for pre-service and in-service teacher education, general education of students, as well as gifted education. Pre-service students of teacher studies, teachers, and students may benefit from ascribing positive value to prosocial behavior, initiative, autonomy, and inventiveness, as well as civic education. In general education, allowing for nonconformity and disobedience when protecting the wellbeing of others and self, supporting the development of moral reasoning and prosocial action repertoire, and teaching the democratic values may seem in order to build teams, groups, and community. Some of the universal values (e.g., Davis, 2003) that both university-level teacher educators, and teachers in classrooms should commit to in daily teaching practice may include responsibility, honesty, empathy and compassion, respect, self-respect, regard for others' rights, caring for our environment, and generally positive life goals. In gifted education, because gifted students often are labeled tomorrow's leaders, discussions of universal values based upon the impact of our behavior upon others (e.g., honesty, fairness, pleasantness, helpfulness, empathy, dependability, and respect for others' rights) would be valuable in developing good moral thinking (Davis, Rimm, & Del Siegle, 2014, p. 283). In order to fulfill this mission, displays of bravery, courage, and valor, civic education, and leadership training, need to become a daily practice.

To detect injustice and set oneself apart from the group, yet at the same time to have the courage to act upon injustice towards making it right, or *to speak out*, for some teachers, regardless of their power of character and virtue, may personally be very risky under certain conditions. The third factor may suggest the interplay of an additional set of intraindividual and social processes indicative of defensive or self-protective strategies of conforming and cooperating with the group involved in (unjust) acts. Here the fearful self is probably involved in reducing sensitivity to injustice from the profiteer perspective (i.e., an individual accepts the personal gain), and not displaying acts of bravery, courage, and valor, but conformity, thus avoiding personal harm. In conclusion, as a very clear message that others can take from our study and apply to their situation in some way, is that this third factor explained no additional criterion variance of peer-rated individual display of prosocial civic actions towards the common good.

**6. Conclusions**

By means of the more complex factor scores, or by using simple scores on the self-assessments of relatively stable dispositional characteristics, the results of this study generally suggest that at least in certain groups, up to a certain level (up to one-fifth of the criterion variance), the display of character strengths and virtues may predict the creation and successful implementation of peer-rated prosocial civic actions. These include being nonhesitant in expressing (unpopular) views with bravery, courage, and valor, while being sensitive to befallen injustice, especially from the observer perspective, and flexibly cooperative towards the group betterment. The results of this study point to the relatively stabile intraindividual differences that predict consensually rated prosocial acts, thereby providing guidelines for which personality differences to acknowledge and nurture in our students if we are to see more initiatives and acts of active citizenship, leadership, and the much needed societal improvements towards the common good in the future.

**7. Limitations and implications for further research**

There are limitations inherent in this study that caution to over-generalize the results – the relatively small number of participants (female students of university teacher studies) and the reliance on self-assessments in the measurement of personality constructs. IPIP personality measures had just satisfactory reliabilities (≈ .70), limiting the correlation size and therefore truncating their predictive value. By means of the provision of the detailed description of materials and procedures used in this study, all the materials and procedures are made available for replication and further study.

**8. Acknowledgements**

We wish to thank the students of teacher studies for devoting their time to participate in this study.

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